

processor as performing the method, there is not even an outside possibility of it reading on performing the method "by hand."

In view thereof, applicant respectfully requests that the Section 112 rejections and the objection to claims 25-27 be withdrawn.

Claim rejections under 35 U.S.C. §103(a)

The Examiner rejected claims 1-12, 28, 29, 32, and 33 under 35 U.S.C. §103(a) over Walker et al. in view of Haq et al., both of record, and rejected claims 13-27, 30, 31, 34, and 35 under 35 U.S.C. §103(a) over Walker et al.

In response, applicant has amended his independent claims to clearly define what constitutes "value to the resource" and "value to the work item" and to clearly distinguish them from "business value." Support for these amendments may be found at, e.g., page 6 of the application. These definitions clearly and explicitly differentiate the claims from whatever selection criteria may be found in either Walker et al. or Haq et al., or in their combination.

In view thereof, applicant requests that the Section 103(a) rejections of his claims as amended be withdrawn.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned **"Version with markings to show changes made."**

The Examiner's objection and rejections having been properly responded to, applicant suggests that the application is now in condition for allowance. Applicant therefore respectfully requests that the application be reconsidered and thereafter be passed to issue.

Although the foregoing is believed to be dispositive of all issues in the application, if the Examiner deems that a telephone interview would advance the prosecution, she is invited to call applicant's attorney at the telephone number listed below.

Respectfully submitted,

J.A. Ford

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## Version With Markings To Show Changes Made

Cancel claims 25 and 26.

Amend claims 1, 9, 13, 21, and 28-35 as follows:

### Amend claim 1:

1                   1. (Amended) A method of selecting a resource for a work  
2 item, comprising[;]:  
3                   determining available resources that possess skills needed by  
4 the work item;  
5                   for each of the determined resources, determining a business  
6 value of having the resource service the work item, the business value  
7 being a measure of qualification of the resource for servicing the work item  
8 based on skills of the resource and skill requirements of the work item;  
9                   for each of the determined resources, determining a value to  
10 the resource of servicing the work item, the value to the resource being a  
11 measure of how the resource is spending time compared with other  
12 resources and goals of the individual resource; and  
13                   selecting a determined resource that has a best combined  
14 value of the business value and the value to the resource, to serve the  
15 work item.

### Amend claim 9:

1                   9. (Amended) A method of selecting a resource for a work  
2 item, comprising:  
3                   determining available resources that possess skills needed by  
4 the work item;  
5                   for each of the determined resources, determining a business  
6 value comprising a sum across all skills of a product of a skill level of the  
7 resource in the skill and a skill weight of the work item for the skill;

8           for each of the determined resources, determining a resource  
9   treatment value, the resource treatment value being a measure of how the  
10 resource is spending time compared with other resources and goals of the  
11 individual resource, the resource treatment value comprising a sum across  
12 all resource treatments of a product of a value of the resource for the  
13 resource treatment and a weight of the work item for the resource  
14 treatment; and

15           selecting a determined resource that has a best combined  
16 score of its business value and its resource treatment value, to serve the  
17 work item

**Amend claim 13:**

1           13. (Amended) A method of selecting a work item for a  
2 resource, comprising:  
3           determining available work items that need skills possessed by  
4 the resource;  
5           for each of the determined work items, determining a business  
6 value of having the resource service the work item, the business value  
7 being a measure of qualification of the resource for servicing of the work  
8 item based on skills of the resource and skill requirements of the work  
9 item;  
10          for each of the determined work items, determining a value to  
11 the work item of being serviced by the resource, the value to the work item  
12 being a measure of how the work item is treated compared to other work  
13 items and treatment goals of the individual work item; and  
14          selecting a determined work item that has a best combined  
15 value of the business value and the value to the work item to be served by  
16 the resource.

**Amend claim 21:**

1           21. (Amended) A method of selecting a work item for a  
2 resource, comprising:  
3           determining available work items that need skills possessed by

4 the resource;  
5 for each of the determined work items, determining a business  
6 value comprising a sum across all skills of a product of a skill level of the  
7 resource in the skill and a skill weight of the work item for the skill;  
8 for each of the determined work items, determining a work item  
9 treatment value, the work item treatment value being a measure of how  
10 the work item is treated compared to other work items and treatment goals  
11 of the individual work item, the work item treatment value comprising a  
12 sum across all work item treatments of a product of the value of the work  
13 item for the work item treatment and a weight of the work item for the work  
14 item treatment; and  
15 selecting a determined work item that has a best combined  
16 score of its business value and work item treatment value, to be served by  
17 the resource.

**Amend claim 28:**

1 28. (Amended) An apparatus for selecting a resource for a  
2 work item, comprising;  
3 means for determining available resources that possess skills  
4 needed by the work item;  
5 means for determining, for each of the determined resources, a  
6 business value of having the resource service the work item, the business  
7 value being a measure of qualification of the resource for servicing the  
8 work item based on skills of the resource and skill requirements of the  
9 work item;  
10 means for determining, for each of the determined resources, a  
11 value to the resource of servicing the work item, the value to the resource  
12 being a measure of how the resource is spending time compared with  
13 other resources and goals of the individual resource; and  
14 means for selecting a determined resource that has a best  
15 combined value of the business value and the value to the resource, to  
16 serve the work item.

**Amend claim 29:**

1                   29. (Amended) An apparatus for selecting a resource for a  
2 work item, comprising:  
3                   means for determining available resources that possess skills  
4 needed by the work item;  
5                   means for determining, for each of the determined resources, a  
6 business value comprising a sum across all skills of a product of a skill  
7 level of the resource in the skill and a skill weight of the work item for the  
8 skill;  
9                   means for determining, for each of the determined resources, a  
10 resource treatment value, the resource treatment value being a measure  
11 of how the resource is spending time compared with other resources and  
12 goals of the individual resource, the resource treatment value comprising  
13 a sum across all resource treatments of a product of a value of the  
14 resource for the resource treatment and a weight of the work item for the  
15 resource treatment; and  
16                   means for selecting a determined resource that has a best  
17 combined score of its business value and its resource treatment value, to  
18 serve the work item.

**Amend claim 30:**

1                   30. (Amended) An apparatus for selecting a work item for a  
2 resource, comprising:  
3                   means for determining available work items that need skills  
4 possessed by the resource;  
5                   means for determining, for each of the determined work items,  
6 a business value of having the resource service the work item, the  
7 business value being a measure of qualification of the resource for  
8 servicing the work item based on skills of the resource and skill  
9 requirements of the work item;  
10                   means for determining, for each of the determined work items,

11 a value to the work item of being serviced by the resource, the value to the  
12 work item being a measure of how the work item is treated compared to  
13 other work items and treatment goals of the individual work item; and  
14 means for selecting a determined work item that has a best  
15 combined value of the business value and the value to the work item to be  
16 served by the resource.

**Amend claim 31:**

1 31. (Amended) An apparatus for selecting a work item for a  
2 resource, comprising:  
3 means for determining available work items that need skills  
4 possessed by the resource;  
5 means for determining, for each of the determined work items,  
6 a business value comprising a sum across all skills of a product of a skill  
7 level of the resource in the skill and a skill weight of the work item for the  
8 skill;  
9 means for determining, for each of the determined work items,  
10 a work item treatment value, the work item treatment value being a  
11 measure of how the work item is treated compared to other work items  
12 and treatment goals of the individual work item, the work item treatment  
13 value comprising a sum across all work item treatments of a product of the  
14 value of the work item for the work item treatment and a weight of the  
15 work item for the work item treatment; and  
16 means for selecting a determined work item that has a best  
17 combined score of its business value and work item treatment value, to be  
18 served by the resource.

**Amend claim 32:**

1 32. (Amended) An arrangement for selecting a resource for a  
2 work item, comprising:  
3 an effector of determining available resources that possess

4 skills needed by the work item;  
5 an effector of determining, for each of the determined  
6 resources, a business value of having the resource service the work item,  
7 the business value being a measure of qualification of the resource for  
8 servicing the work item based on skills of the resource and skill  
9 requirements of the work item;  
10 an effector of determining, for each of the determined  
11 resources, a value to the resource of servicing the work item, the value to  
12 the resource being a measure of how the resource is spending time  
13 compared with other resources and goals of the individual resource; and  
14 an effector of selecting a determined resource that has a best  
15 combined value of the business value and the value to the resource, to  
16 serve the work item.

**Amend claim 33:**

1 33. (Amended) An arrangement for selecting a resource for a  
2 work item, comprising:  
3 an effector of determining available resources that possess  
4 skills needed by the work item;  
5 an effector of determining, for each of the determined  
6 resources, a business value comprising a sum across all skills of a  
7 product of a skill level of the resource in the skill and a skill weight of the  
8 work item for the skill;  
9 an effector of determining, for each of the determined  
10 resources, a resource treatment value, the resource treatment value being  
11 a measure of how the resource is spending time compared with other  
12 resources and goals of the individual resource, the resource treatment  
13 value comprising a sum across all resource treatments of a product of a  
14 value of the resource for the resource treatment and a weight of the work  
15 item for the resource treatment; and  
16 an effector of selecting a determined resource that has a best



17 combined score of its business value and its resource treatment value, to  
18 serve the work item

**Amend claim 34:**

1 34. (Amended) An arrangement for selecting a work item for a  
2 resource, comprising:  
3 an effector of determining available work items that need skills  
4 possessed by the resource;  
5 an effector of determining, for each of the determined work  
6 items, a business value of having the resource service the work item, the  
7 business value being a measure of qualification of the resource for  
8 servicing the work item based on skills of the resource and skill  
9 requirements of the work item;  
10 an effector of determining, for each of the determined work  
11 items, a value to the work item of being serviced by the resource, the  
12 value to the work item being a measure of how the work item is treated  
13 compared to other work items and treatment goals of the individual work  
14 item; and  
15 an effector of selecting a determined work item that has a best  
16 combined value of the business value and the value to the work item to be  
17 served by the resource.

**Amend claim 35:**

1 35. (Amended) An arrangement for selecting a work item for a  
2 resource, comprising:  
3 an effector of determining available work items that need skills  
4 possessed by the resource;  
5 an effector of determining, for each of the determined work  
6 items, a business value comprising a sum across all skills of a product of a  
7 skill level of the resource in the skill and a skill weight of the work item for  
8 the skill;

9                   an effector of determining, for each of the determined work  
10 items, a work item treatment value, the work item treatment value being a  
11 measure of how the work item is treated compared to other work items  
12 and treatment goals of the individual work item, the work item treatment  
13 value comprising a sum across all work item treatments of a product of the  
14 value of the work item for the work item treatment and a weight of the  
15 work item for the work item treatment; and

16                   an effector of selecting a determined work item that has a best  
17 combined score of its business value and work item treatment value, to be  
18 served by the resource.

Add the following new claims 36-59 to the application:

1                   --36. A computer-readable medium containing instructions  
2 which, when executed in a computer, cause the computer to perform  
3 selection of a resource for a work item, comprising:  
4                   determining available resources that possess skills needed by  
5 the work item;  
6                   for each of the determined resources, determining a business  
7 value of having the resource service the work item, the business value  
8 being a measure of qualification of the resource for servicing the work item  
9 based on skills of the resource and skill requirements of the work item;  
10                  for each of the determined resources, determining a value to  
11 the resource of servicing the work item, the value to the resource being a  
12 measure of how the resource is spending time compared with other  
13 resources and goals of the individual resource; and  
14                  selecting a determined resource that has a best combined  
15 value of the business value and the value to the resource, to serve the  
16 work item.

1           37. The medium of claim 36 wherein:  
2           determining a business value comprises  
3           determining the business value weighted by a business value  
4 weight corresponding to the work item;  
5           determining a value to the resource comprises  
6           determining the value to the resource weighted by a resource  
7 value weight corresponding to the work item; and  
8           selecting comprises  
9           selecting a determined resource that has a best combined  
10 value of the weighted business value and the weighted value to the  
11 resource.

1           38. The medium of claim 37 wherein:  
2           determining a business value comprises  
3           determining a weighted business value as a product of (a) the  
4 business value weight corresponding to the work item and (b) a sum of  
5 products of a level of each said needed skill of the resource and a weight  
6 of said needed skill of the work item; and  
7           determining a value to the resource comprises  
8           determining a weighted resource treatment value as a product  
9 of (c) a resource treatment weight corresponding to the work item and (d)  
10 a sum of products of each treatment of the resource and a weight of said  
11 treatment of the resource.

1           39. The medium of claim 38 wherein:  
2           the sums of products are scaled sums, and  
3           the treatments are scaled treatments.

1           40. The medium of claim 39 wherein:  
2           selecting comprises  
3           selecting the determined resource that has a highest sum of  
4 the weighted business value and the weighted resource treatment value.

1           41. The medium of claim 38 wherein:  
2           the resource treatments of a resource comprise a time since  
3 the resource became available and a time that the resource has not spent  
4 serving work items.

1           42. The medium of claim 41 wherein:  
2           the treatments of the resource further comprise a measure of  
3 an effect that serving of the work item would have on a goal of the  
4 resource.

1           43. The medium of claim 42 wherein:  
2           the measure of the effect comprises a difference between (a) a  
3 distance of an actual allocation of worktime of the resource among skills  
4 from a goal allocation of the worktime of the resource among the skills and  
5 (b) a distance of an estimated allocation of the worktime of the resource  
6 among the skills if the resource serves the work item from the goal  
7 allocation.

1           44. A computer-readable medium containing instructions  
2 which, when executed in a computer, cause the computer to perform  
3 selection of a resource for a work item, comprising:  
4           determining available resources that possess skills needed by  
5 the work item;  
6           for each of the determined resources, determining a business  
7 value comprising a sum across all skills of a product of a skill level of the  
8 resource in the skill and a skill weight of the work item for the skill;  
9           for each of the determined resources, determining a resource  
10 treatment value, the resource treatment value being a measure of how the  
11 resource is spending time compared with other resources and goals of the  
12 individual resource, the resource treatment value comprising a sum across  
13 all resource treatments of a product of a value of the resource for the  
14 resource treatment and a weight of the work item for the resource  
15 treatment; and

16 selecting a determined resource that has a best combined  
17 score of its business value and its resource treatment value, to serve the  
18 work item

1 45. The medium of claim 44 wherein:  
2 the resource treatments of a resource comprise a time since  
3 the resource became available, a time that the resource has spent not  
4 serving work items, and a measure of an effect that serving the work item  
5 would have on a goal of the resource.

1 46. The medium of claim 44 wherein:  
2 determining a business value comprises  
3 determining a scaled business value comprising the business  
4 value scaled by a first scaling factor that is common to all of the  
5 determined resources;  
6 determining a resource treatment value comprises  
7 for each resource treatment, determining a scaled value of the  
8 resource comprising the value of the resource for that resource treatment  
9 scaled by a scaling factor that is common for that resource treatment to all  
10 of the determined resources, and  
11 determining a scaled resource treatment value comprising a  
12 sum, scaled by a second scaling factor that is common to all of the  
13 determined resources, across all resource treatments of a product of the  
14 scaled value of the resource for the resource treatment and a weight of  
15 the work item for the resource treatment; and  
16 selecting comprises  
17 selecting a determined resource that has a best sum of its  
18 scaled business value and its scaled resource treatment value to serve  
19 the work item.

1 47. The medium of claim 46 wherein:  
2 each scaling factor comprises a fraction having in its  
3 denominator a maximum value of the value to which said scaling factor

4 applies of any of the resources.

1           48. A computer-readable medium containing instructions  
2 which, when executed in a computer, cause the computer to perform  
3 selection of a work item for a resource, comprising:  
4           determining available work items that need skills possessed by  
5 the resource;  
6           for each of the determined work items, determining a business  
7 value of having the resource service the work item, the business value  
8 being a measure of qualification of the resource for servicing of the work  
9 item based on skills of the resource and skill requirements of the work  
10 item;  
11           for each of the determined work items, determining a value to  
12 the work item of being serviced by the resource, the value to the work item  
13 being a measure of how the work item is treated compared to other work  
14 items and treatment goals of the individual work item; and  
15           selecting a determined work item that has a best combined  
16 value of the business value and the value to the work item to be served by  
17 the resource.

1           49. The medium of claim 48 wherein:  
2           determining business value comprises  
3           determining the business value weighted by a business value  
4 weight corresponding to the work item;  
5           determining a value to the work item comprises  
6           determining the value to the work item weighted by a work item  
7 value weight corresponding to the work item; and  
8           selecting comprises  
9           selecting a determined work item that has a best combined  
10 value of the weighted business value and the weighted value to the work  
11 item.

1 50. The medium of claim 49 wherein:  
2 determining a business value comprises  
3 determining a weighted business value as a product of (a) the  
4 business value weight corresponding to the work item and (b) a sum of  
5 products of a level of each said needed skill of the resource and a weight  
6 of said needed skill of the work item; and  
7 determining a value to the work item comprises  
8 determining a weighted work item treatment value as a product  
9 of (c) a work item treatment weight corresponding to the work item and (d)  
10 a sum of products of each treatment of the work item and a weight of said  
11 treatment of the work item.

1 51. The medium of claim 50 wherein:  
2 the sums of products are scaled sums, and  
3 the treatments are scaled treatments.

1 52. The medium of claim 51 wherein:  
2 selecting comprises  
3 selecting the determined work item that has a highest sum of  
4 the weighted business value and the weighted work item treatment value.

1 53. The medium of claim 50 wherein:  
2 the work item treatments of a work item comprise a time that  
3 the work item has been waiting for service and an estimated time that the  
4 work item will have to wait for service.

1 54. The medium of claim 53 wherein:  
2 the treatments of a work item further comprise a time by which  
3 the work item has exceeded its target wait time.

1 55. The medium of claim 53 wherein:  
2 the estimated wait time that the work item will have to wait for  
3 service comprises a product of (a) a ratio of a total number of work items

4 waiting for service and an average number of work items waiting for  
5 service and (b) a sum of average wait times of individual said needed  
6 skills each weighted by a ratio of the weight of said individual skill and a  
7 sum of the weights of the needed skills.

1           56. A computer-readable medium containing instructions  
2 which, when executed in a computer, cause the computer to perform a  
3 selection of a work item for a resource, comprising:  
4           determining available work items that need skills possessed by  
5 the resource;  
6           for each of the determined work items, determining a business  
7 value comprising a sum across all skills of a product of a skill level of the  
8 resource in the skill and a skill weight of the work item for the skill;  
9           for each of the determined work items, determining a work item  
10 treatment value, the work item treatment value being a measure of how  
11 the work item is treated compared to other work items and treatment goals  
12 of the individual work item, the work item treatment value comprising a  
13 sum across all work item treatments of a product of the value of the work  
14 item for the work item treatment and a weight of the work item for the work  
15 item treatment; and  
16           selecting a determined work item that has a best combined  
17 score of its business value and work item treatment value, to be served by  
18 the resource.

1           57. The medium of claim 56 wherein:  
2           the work item treatments of a work item comprise a time that  
3 the work item has spent waiting to be serviced, an estimated time that the  
4 item will spend waiting to be serviced, and a time by which the work item  
5 has exceeded its target waiting time.

1           58. The medium of claim 56 wherein:  
2           determining a business value comprises  
3           determining a scaled business value comprising the business



4 value scaled by a first scaling factor that is common to all of the  
5 determined work items;  
6 determining a work item treatment value comprises  
7 for each work item treatment, determining a scaled value of the  
8 work item comprising the value of the work item for that work item  
9 treatment scaled by a scaling factor that is common for that work item  
10 treatment to all of the determined work items, and  
11 determining a scaled work item treatment value comprising a  
12 sum, scaled by a second scaling factor that is common to all of the  
13 determined work items, across all work item treatments of a product of the  
14 scaled value of the work item for the work item treatment and a weight of  
15 the work item for the work item treatment; and  
16 selecting comprises  
17 selecting a determined work item that has a best sum of its  
18 scaled business value and its scaled work item treatment value, to be  
19 served by the resource.

1 59. The medium of claim 58 wherein:  
2 each scaling factor comprises a fraction having in its  
3 denominator a maximum value of the value to which said scaling factor  
4 applies of any of the work items.--